SEQUENCE LISTING

```
<110> Yutaka KANDA
      Mitsuo SATOH
      Kazuyasu NAKAMURA
     Kazuhisa UCHIDA
      Toyohide SHINKAWA
     Naoko YAMANE
     Motoo YAMASAKI
     Nobuo HANAI
```

<120> ANTIBODY COMPOSITION-PRODUCING CELL

<130>

.

<140>

<141>

<150> JP 2000-308526

<151> 2000-10-06

<150> US 60/268, 926

<151> 2001-02-16

<160> 73

<170> PatentIn Ver. 2.1

<210> 1 <211> 2008

<212> DNA

<213> Cricetulus griseus

aacagaaact tattttcctg tgtggctaac tagaaccaga gtacaatgtt tccaattctt 60 tgagctccga gaagacagaa gggagttgaa actctgaaaa tgcgggcatg gactggttcc 120 tggcgttgga ttatgctcat tctttttgcc tgggggacct tattgtttta tataggtggt 180 catttggttc gagataatga ccaccetgac cattctagca gagaactetc caagattett 240 gcaaagctgg agcgcttaaa acaacaaaat gaagacttga ggagaatggc tgagtctctc 300 cgaataccag aaggeectat tgatcagggg acagetacag gaagagteeg tgttttagaa 360 gaacagettg ttaaggecaa agaacagatt gaaaattaca agaaacaage taggaatgat 420 ctgggaaagg atcatgaaat cttaaggagg aggattgaaa atggagctaa agagctctgg 480 ttttttctac aaagtgaatt gaagaaatta aagaaattag aaggaaacga actccaaaga 540 catgcagatg aaattetttt ggatttagga catcatgaaa ggtetateat gacagateta 600 tactacctca gtcaaacaga tggagcaggt gagtggcggg aaaaagaagc caaagatctg 660 acagagetgg tecageggag aataacatat etgeagaate eeaaggaetg eageaaagee 720 agaaagetgg tatgtaatat caacaaagge tgtggetatg gatgteaaet ceateatgtg 780 gtttactgct tcatgattgc ttatggcacc cagcgaacac tcatcttgga atctcagaat 840 tggcgctatg ctactggagg atgggagact gtgtttagac ctgtaagtga gacatgcaca 900 gacaggtctg gcctctccac tggacactgg tcaggtgaag tgaaggacaa aaatgttcaa 960 gtggtcgagc tececattgt agacageete cateetegte eteettaett accettgget 1020

gtaccagaag accttgcaga tcgactcctg agagtccatg gtgatcctgc agtgtggtgg 1080 gtatcccagt ttgtcaaata cttgatccgt ccacaacctt ggctggaaag ggaaatagaa 1140 gaaaccacca agaagcttgg cttcaaacat ccagttattg gagtccatgt cagacgcact 1200 gacaaagtgg gaacagaagc agccttccat cccattgagg aatacatggt acacgttgaa 1260 gaacattttc agcttctcga acgcagaatg aaagtggata aaaaaagagt gtatctggcc 1320 actgatgacc cttctttgtt aaaggaggca aagacaaagt actccaatta tgaatttatt 1380 agtgataact ctatttcttg gtcagctgga ctacacaacc gatacacaga aaattcactt 1440 eggggegtga teetggatat acaetttete teeeaggetg aetteettgt gtgtaetttt 1500 teateecagg tetgtagggt tgettatgaa ateatgeaaa caetgeatee tgatgeetet 1560 gcaaacttcc attctttaga tgacatctac tattttggag gccaaaatgc ccacaaccag 1620 attgcagttt atcctcacca acctcgaact aaagaggaaa tccccatgga acctggagat 1680 atcattggtg tggctggaaa ccattggaat ggttactcta aaggtgtcaa cagaaaacta 1740 ggaaaaacag gcctgtaccc ttcctacaaa gtccgagaga agatagaaac agtcaaatac 1800 cctacatatc ctgaagctga aaaatagaga tggagtgtaa gagattaaca acagaattta 1860 gttcagacca tctcagccaa gcagaagacc cagactaaca tatggttcat tgacagacat 1920 gctccgcacc aagagcaagt gggaaccctc agatgctgca ctggtggaac gcctctttgt 1980 2008 gaagggctgc tgtgccctca agcccatg

<210> 2 <211> 1728 <212> DNA <213> Mus musculus

4400> 2 atgeggeat ggaetggtte etggegttgg attatgetea ttettttge etggggaee 60 ttgttatttt atataggtgg teatttggtt egagataatg accaecetga teaeteeage 120 agagaactet ecaagattet tgeaaagett gaaegettaa aacageaaaa tgaagaettg 180 aggegaatgg etgagtetet eegaatacea gaaggeeea ttgaceaggg gacagetaca 240 ggaagagtee gtgtttaga agaacagett gttaaggeea aagaacagat tgaaaattae 300 aagaaacaag etagaaatgg tetgggaag gateatgaaa tettaagaag gaggattgaa 360 aatggageta aagaecteg gtttttea eaaagegaac tgaagaaatt aaageattta 420 gaaggaaatg aacteeaaag acatgeagat gaaattettt tggatttagg acaecatgaa 480 aggtetatea tgacagatet ataetacete agteaaacag atggageagg ggattggegt 540 gaaaaagagg ecaaagatet gacagagetg gteeagegga gaataacata tetecagaat 600 eetaaggaet geageaaage eaggaagetg gtgtgtaaca teaataaagg etgtggetat 660 ggttgteaac teeateegt ggtetaetgt tteatgattg ettatggeae ecagegaaca 720 eteatettgg aateteaaa ttggegetat ggeeteteea etggaeactg gteaggtga 840 eetgtaagtg agaeatgtae agaeagatet ggeeteteea etggaeactg gteaggtga 840 eetgtaagtg agaeatgtae agaeagatet ggeeteteea etggaeactg gteaggtgaa 840

gtaaatgaca aaaacattca agtggtcgag ctccccattg tagacagcct ccatcctcgg 900 cctccttact taccactggc tgttccagaa gaccttgcag accgactcct aagagtccat 960 ggtgaccetg cagtgtggtg ggtgtcccag tttgtcaaat acttgattcg tccacaacct 1020 tggctggaaa aggaaataga agaagccacc aagaagcttg gcttcaaaca tccagttatt 1080 ggagtccatg tcagacgcac agacaaagtg ggaacagaag cagccttcca ccccatcgag 1140 gagtacatgg tacacgttga agaacatttt cagcttctcg cacgcagaat gcaagtggat 1200 aaaaaaagag tatatetgge taetgatgat eetaetttgt taaaggagge aaagacaaag 1260 tactccaatt atgaatttat tagtgataac tctatttctt ggtcagctgg actacacaat 1320 eggtacacag aaaattcact teggggtgtg atcetggata tacactttet etcacagget 1380 gactttctag tgtgtacttt ttcatcccag gtctgtcggg ttgcttatga aatcatgcaa 1440 accetgcate etgatgeete tgegaactte cattetttgg atgacateta etattttgga 1500 ggccaaaatg cccacaatca gattgctgtt tatcctcaca aacctcgaac tgaagaggaa 1560 attecaatgg aacetggaga tateattggt gtggetggaa aceattggga tggttattet 1620 aaaggtatca acagaaaact tggaaaaaca ggcttatatc cctcctacaa agtccgagag 1680 1728 aagatagaaa cagtcaagta tcccacatat cctgaagctg aaaaatag

<210> 3 <211> 9196 <212> DNA

<213> Cricetulus griseus

tctagaccag gctggtctcg aactcacaga gaaccacctg cctctgccac ctgagtgctg 60 ggattaaagg tgtgcaccac caccgcccgg cgtaaaatca tatttttgaa tattgtgata 120 atttacatta taattgtaag taaaaatttt cagcctattt tgttatacat ttttgcgtaa 180 attattcttt tttgaaagtt ttgttgtcca taatagtcta gggaaacata aagttataat 240 ttttgtctat gtattgcat attatactat ttaatctcct aatgtccagg aaataaatag 300 ggtatgtaat agcttcaaca tgtggtatga tagaattttt cagtgctata taagttgtta 360 cagcaaagtg ttattaattc attatgtccat atttcaattt tttatgaatt attaaattga 420 atccttaage tgccagaact agaattttat tttaatcagg aagccccaaa tctgttcatt 480 ctttctatat atgtggaaag gtaggcctca ctaactgatt cttcacctgt tttagaacat 540 ggtccaagaa tggagttatg taaggggaat tacaagtgtg agaaaactcc tagaaaacaa 600 gatgagtctt gtgaccttag tttcttaaa aacacaaaat tcttggaatg tgtttcatg 660 ttcctcccag gtggatagga gtgagttat ttcagattat ttattacaac tggctgttgt 720 tacttgttc tatgtctta tagaaaaaca tattttttt gccacatgca gcttgtcctt 780 atgatttta acttgtgga ctcttaactc tcagagtata aattgctga tgctatgaat 840 aaagttggct attgtatgag acttcagcc acttcaatta ttggcttcat tctctcagat 900

cccaccacct ccagagtggt aaacaacttg aaccattaaa cagactttag tctttatttg 960 aatgatagat ggggatatca gatttatagg cacagggttt tgagaaaggg agaaggtaaa 1020 cagtagagtt taacaacaac aaaaagtata ctttgtaaac gtaaaactat ttattaaagt 1080 agtagacaag acattaaata ttccttggga ttagtgcttt ttgaattttg ctttcaaata 1140 atagtcagtg agtatacccc tcccccattc tatattttag cagaaatcag aataaatggt 1200 gtttctggta cattcttttg tagagaattt attttctttg ggtttttgtg catttaaagt 1260 caataaaaat taaggttcag taatagaaaa aaaactctga tttttggaat cccctttctt 1320 cagcttttct atttaatctc ttaatgataa tttaatttgt ggccatgtgg tcaaagtata 1380 tageettgta tatgtaaatg ttttaaceaa eetgeettta eagtaaetat ataattttat 1440 tetataatat atgaetttte tteeataget ttagagttge eeagteaett taagttaeat 1500 tttcatatat gttctttgtg ggaggagata attttatttc taagagaatc ctaagcatac 1560 tgattgagaa atggcaaaca aaacacataa ttaaagctga taaagaacga acatttggag 1620 tttaaaatac atagccaccc taagggttta actgttgtta gccttctttt ggaattttta 1680 ttagttcata tagaaaaatg gattttatcg tgacatttcc atatatgtat ataatatatt 1740 tacatcatat ccacctgtaa ttattagtgt ttttaaatat atttgaaaaa ataatggtct 1800 ggtttgatcc atttgaacct tttgatgttt ggtgtggttg ccaattggtt gatggttatg 1860 ataacctttg cttctctaag gttcaagtca gtttgagaat atgtcctcta aaaatgacag 1920 gttgcaagtt aagtagtgag atgacagcga gatggagtga tgagaatttg tagaaatgaa 1980 ttcacttata ctgagaactt gttttgcttt tagataatga acatattagc ctgaagtaca 2040 tageegaatt gattaattat teaaagatat aatettttaa teeetataaa agaggtatta 2100 cacaacaatt caagaaagat agaattagac ttccagtatt ggagtgaacc atttgttatc 2160 aggtagaacc ctaacgtgtg tggttgactt aaagtgttta ctttttacct gatactgggt 2220 agctaattgt ctttcagcct cctggccaaa gataccatga aagtcaactt acgttgtatt 2280 ctatatetea aacaaeteag ggtgtttett aetettteea eageatgtag ageeeaggaa 2340 gcacaggaca agaaagctgc ctccttgtat caccaggaag atctttttgt aagagtcatc 2400 acagtatacc agagagacta attttgtctg aagcatcatg tgttgaaaca acagaaactt 2460 attiticetgt giggetaact agaaccagag tacaatgitt ccaatteitt gageteegag 2520 aagacagaag ggagttgaaa ctctgaaaat gcgggcatgg actggttcct ggcgttggat 2580 tatgctcatt ctttttgcct gggggacctt attgttttat ataggtggtc atttggttcg 2640 agataatgac caccetgace attetageag agaactetee aagattettg caaagetgga 2700 gcgcttaaaa caacaaatg aagacttgag gagaatggct gagtctctcc ggtaggtttg 2760 aaatactcaa ggatttgatg aaatactgtg cttgaccttt aggtataggg tctcagtctg 2820 ctgttgaaaa atataatttc tacaaaccgt ctttgtaaaa ttttaagtat tgtagcagac 2880 tttttaaaag teagtgatae atetatatag teaatatagg tttacatagt tgeaatetta 2940 ttttgcatat gaatcagtat atagaagcag tggcatttat atgcttatgt tgcatttaca 3000 attatgttta gacgaacaca aactttatgt gatttggatt agtgctcatt aaatttttt 3060 attetatgga etacaacaga gacataaatt ttgaaagget tagttactet taaattetta 3120 tgatgaaaag caaaaattca ttgttaaata gaacagtgca tccggaatgt gggtaattat 3180 tgccatattt ctagtctact aaaaattgtg gcataactgt tcaaagtcat cagttgtttg 3240 gaaagccaaa gtctgattta aatggaaaac ataaacaatg atatctattt ctagatacct 3300 ttaacttgca gttactgagt ttacaagttg tctgacaact ttggattctc ttacttcata 3360 tctaagaatg atcatgtgta cagtgcttac tgtcacttta aaaaactgca gggctagaca 3420 tgcagatatg aagactttga cattagatgt ggtaattggc actaccagca agtggtatta 3480 agatacagct gaatatatta ctttttgagg aacataattc atgaatggaa agtggagcat 3540 tagagaggat gccttctggc tctcccacac cactgtttgc atccattgca tttcacactg 3600 cttttagaac tcagatgttt catatggtat attgtgtaac tcaccatcag ttttatcttt 3660 aaatgtctat ggatgataat gttgtatgtt aacactttta caaaaacaaa tgaagccata 3720 tcctcggtgt gagttgtgat ggtggtaatt gtcacaatag gattattcag caaggaacta 3780 agtcagggac aagaagtggg cgatactttg ttggattaaa tcattttact ggaagttcat 3840 cagggagggt tatgaaagtt gtggtctttg aactgaaatt atatgtgatt cattattctt 3900 gatttaggcc ttgctaatag taactatcat ttattgggaa tttgtcatat gtgccaattt 3960 gtcatgggcc agacagcgtg ttttactgaa tttctagata tctttatgag attctagtac 4020 tgttttcagc cattttacag atgaagaatc ttaaaaaaatg ttaaataatt tagtttgccc 4080 aagattatac gttaacaaat ggtagaacct tctttgaatt ctggcagtat ggctacacag 4140 tccgaactct tatcttccta agctgaaaac agaaaaagca atgacccaga aaattttatt 4200 taaaagtete aggagagaet teceateetg agaagatete titteeetit tataatittag 4260 geteetgaat aateaetgaa titteteeat giteeateta tagtaetgit attietgitt 4320 teetttttte ttaccacaaa gtatettgtt tttgetgtat gaaagaaaat gtgttattgt 4380 aatgtgaaat tetetgteee tgeagggtee cacateegee teaateeeaa ataaacacae 4440 agaggetgta ttaattatga aactgttggt cagttggeta gggettetta ttggetaget 4500 ctgtcttaat tattaaacca taactactat tgtaagtatt tccatgtggt cttatcttac 4560 caaggaaagg gtccagggac ctcttactcc tctggcgtgt tggcagtgaa gaggagagag 4620 cgattteeta tttgtetetg ettattttet gattetgete agetatgtea etteetgeet 4680 ggccaatcag ccaatcagtg ttttattcat tagccaataa aagaaacatt tacacagaag 4740 gacttecece ateatgttat ttgtatgagt tetteagaaa ateatagtat ettttaatae 4800 taatttttat aaaaaattaa ttgtattgaa aattatgtgt atatgtgtct gtgtgtcgat 4860 ttgtgctcat aagtagcatg gagtgcagaa gagggaatca gatcttttt taagggacaa 4920 agagtttatt cagattacat tttaaggtga taatgtatga ttgcaaggtt atcaacatgg 4980 cagaaatgtg aagaagctgg tcacattaca tccagagtca agagtagaga gcaatgaatt 5040 gatgcatgca ttcctgtgct cagctcactt ttcctggagc tgagctgatt gtaagccatc 5100 tgatgtcttt gctgggaact aactcaaagg caagttcaaa acctgttctt aagtataagc 5160 catctctcca gtccctcata tggtctctta agacactttc tttatattct tgtacataga 5220 aattgaattc ctaacaactg cattcaaatt acaaaatagt ttttaaaagc tgatataata 5280 aatgtaaata caatctagaa catttttata aataagcata ttaactcagt aaaaataaat 5340 gcatggttat tttccttcat tagggaagta tgtctcccca ggctgttctc tagattctac 5400 tagtaatget gtttgtacac catecacagg ggttttattt taaagctaag acatgaatga 5460 tggacatgct tgttagcatt tagacttttt tccttactat aattgagcta gtatttttgt 5520 gctcagtttg atatctgtta attcagataa atgtaatagt aggtaatttc tttgtgataa 5580 aggcatataa attgaagttg gaaaacaaaa gcctgaaatg acagttttta agattcagaa 5640 caataatttt caaaagcagt tacccaactt tccaaataca atctgcagtt ttcttgatat 5700 gtgataaatt tagacaaaga aatagcacat tttaaaatag ctatttactc ttgatttttt 5760 tttcaaattt aggctagttc actagttgtg tgtaaggtta tggctgcaaa catctttgac 5820 tettggttag ggaateeagg atgatttaeg tgtttggeea aaatettgtt eeattetggg 5880 tttettetet atetaggtag etageaeaag ttaaaggtgt ggtagtattg gaaggetete 5940 aggtatatat ttctatattc tgtatttttt tcctctgtca tatatttgct ttctgtttta 6000 ttgatttcta ctgttagttt gatacttact ttcttacact ttctttggga tttattttgc 6060 tgttctaaga tttcttagca agttcatatc actgatttta acagttgctt cttttgtaat 6120 atagactgaa tgccccttat ttgaaatgct tgggatcaga aactcagatt tgaacttttc 6180 ttttttaata tttccatcaa gtttaccagc tgaatgtcct gatccaagaa tatgaaatct 6240 gaaatgettt gaaatetgaa aettttagag tgataaaget teeetttaaa ttaatttgtg 6300 ttctatattt tttgacaatg tcaacctttc attgttatcc aatgagtgaa catattttca 6360 attittitgt tigatotgit atattitgat otgacoatat tiataaaaatt tiattiaatt 6420 tgaatgttgt gctgttactt atctttatta ttatttttgc ttattttcta gccaaatgaa 6480 attatattct gtattatttt agtttgaatt ttactttgtg gcttagtaac tgccttttgt 6540 tggtgaatgc ttaagaaaaa cgtgtggtct actgatattg gttctaatct tatatagcat 6600 gttgtttgtt aggtagttga ttatgctggt cagattgtct tgagtttatg caaatgtaaa 6660 atatttagat gettgttttg ttgtetaaga acaaagtatg ettgetgtet eetateggtt 6720 ctggtttttc cattcatctc ttcaagctgt tttgtgtgtt gaatactaac tccgtactat 6780 cttgttttct gtgaattaac cccttttcaa aggtttcttt tcttttttt tttaagggac 6840 aacaagttta ttcagattac attttaagct gataatgtat gattgcaagg ttatcaacat 6900 ggcagaaatg tgaagaagct aggcacatta catccacatg gagtcaagag cagagagcag 6960 tgaattaatg catgcattcc tgtggtcagc tcacttttcc tattcttaga tagtctagga 7020

tcataaacct ggggaatagt gctaccacaa tgggcatatc cacttacttc agttcatgca 7080 atcaaccaag gcacatccac aggaaaaact gatttagaca acctctcatt gagactcttc 7140 ccagatgatt agactgtgtc aagttgacaa ttaaaactat cacacctgaa gccatcacta 7200 gtaaatataa tgaaaatgtt gattatcacc ataattcatc tgtatccctt tgttattgta 7260 gattttgtga agttcctatt caagtccctg ttccttcctt aaaaacctgt tttttagtta 7320 aataggtttt ttagtgttcc tgtctgtaaa tactttttta aagttagata ttattttcaa 7380 gtatgttete ceagtetttg gettgtattt teateeette aatacatata tttttgtaat 7440 ttattttttt tatttaaatt agaaacaaag ctgcttttac atgtcagtct cagttccctc 7500 tecetecet cetecetge tececaceta ageceeaatt ceaacteett tetteteee 7560 aggaagggtg aggccctcca tgggggaaat cttcaatgtc tgtcatatca tttggagcag 7620 ggcctagacc ctccccagtg tgtctaggct gagagagtat ccctctatgt ggagagggct 7680 cccaaagttc atttgtgtac taggggtaaa tactgatcca ctatcagtgg ccccatagat 7740 tgtccggacc tccaaactga cttcctcctt cagggagtct ggaacagttc tatgctggtt 7800 teccagatat cagtetgggg tecatgagea acceettgtt caggteagtt gtttetgtag 7860 gtttccccag cccggtcttg acccctttgc tcatcacttc tccctctctg caactggatt 7920 ccagagttca gctcagtgtt tagctgtggg tgtctgcatc tgcttccatc agctactgga 7980 tgagggctct aggatggcat ataaggtagt catcagtctc attatcagag aagggctttt 8040 aaggtagcct cttgattatt gcttagattg ttagttgggg tcaaccttgt aggtctctgg 8100 acagtgacag aattetettt aaacetataa tggeteeete tgtggtggta teeettttet 8160 tgctctcatc cgttcctccc ctgactagat cttcctgctc cctcatgtcc tcctctcccc 8220 teceettete ecettetett tettetaaet eeeteteeee tecaeceaeg ateceeatta 8280 gettatgaga tettgteett attttageaa aacetttttg getataaaat taattaattt 8340 aatatgetta tateaggttt attttggeta gtatttgtat gtgtttggtt agtgttttta 8400 accttaattg acatgtatcc ttatatttag acacagattt aaatatttga agttttttt 8460 ttttttttt ttaaagattt atttatttt tatgtcttct gcctgcatgc cagaagaggg 8520 caccagatet catteaaggt ggttgtgage caccatgtgg ttgetgggaa ttgaacteag 8580 gacctctgga agaacagtca gtgctcttaa ccgctgagcc atctctccag cccctgaagt 8640 gtttctttta aagaggatag cagtgcatca tttttccctt tgaccaatga ctcctacctt 8700 actgaattgt tttagccatt tatatgtaat gctgttacca ggtttacatt ttcttttatc 8760 ttgctaaatt tcttccctgt ttgtctcatc tcttattttt gtctgttgga ttatataggc 8820 ttttattttt ctgtttttac agtaagttat atcaaattaa aattatttta tggaatgggt 8880 gtgttgacta catgtatgtc tgtgcaccat gtgctgacct ggtcttggcc agaagaaggt 8940 gtcatattct ctgaaactgg tattgtggat gttacgaact gccatagggt gctaggaatc 9000 aaaccccage teetetggaa aagcagecae tgetetgage caetgagtee tetetteaag 9060

caggtgatgc caacttttaa tggttaccag tggataagag tgcttgtatc tctagcaccc 9120 atgaaaattt atgcattgct atatgggctt gtcacttcag cattgtgtga cagagacagg 9180 9196 aggatcccaa gagctc ⟨210⟩ 4 <211> 25

<212> DNA <213> Artificial Sequence

(223) Description of Artificial Sequense: Synthetic DNA

<400> 4 actcatcttg gaatctcaga attgg

25

<210> 5 <211> 24 <212> DNA <213> Artificial Sequence

(223) Description of Artificial Sequense: Synthetic DNA

<400> 5 cttgaccgtt tctatcttct ctcg

24

<210> 6 <211> 979 <212> DNA <213> Cricetulus griseus

<400> 6 actcatcttg gaatctcaga attggcgcta tgctactgga ggatgggaga ctgtgtttag 60 acctgtaagt gagacatgca cagacaggtc tggcctctcc actggacact ggtcaggtga 120 agtgaaggac aaaaatgttc aagtggtcga gctccccatt gtagacagcc tccatcctcg 180 tectecttae ttaccettgg etgtaceaga agacettgea gategaetee tgagagteea 240 tggtgateet geagtgtggt gggtateeea gtttgteaaa taettgatee gteeacaace 300 ttggctggaa agggaaatag aagaaaccac caagaagctt ggcttcaaac atccagttat 360 tggagtccat gtcagacgca ctgacaaagt gggaacagaa gcagccttcc atcccattga 420 ggaatacatg gtacacgttg aagaacattt tcagcttctc gaacgcagaa tgaaagtgga 480 taaaaaaaga gtgtatctgg ccactgatga cccttctttg ttaaaggagg caaagacaaa 540 gtactccaat tatgaattta ttagtgataa ctctatttct tggtcagctg gactacacaa 600 ccgatacaca gaaaattcac ttcggggcgt gatcctggat atacactttc tctcccaggc 660 tgacttcctt gtgtgtactt tttcatccca ggtctgtagg gttgcttatg aaatcatgca 720 aacactgcat cctgatgcct ctgcaaactt ccattcttta gatgacatct actattttgg 780 aggecaaaat geceacaace agattgeagt ttateeteae caacetegaa etaaagagga 840 aatccccatg gaacctggag atatcattgg tgtggctgga aaccattgga atggttactc 900 taaaggtgtc aacagaaaac taggaaaaac aggcctgtac ccttcctaca aagtccgaga 960

gaagatagaa acggicaag	313
<210> 7 <211> 979 <212> DNA <213> Rattus norvegicus	
$\ensuremath{<}400\ensuremath{>}\ensuremath{7}$ actcatcttg gaatctcaga attggcgcta tgctactggt ggatgggaga ctgtgtttag	60
acctgtaagt gagacatgca cagacagatc tggcctctcc actggacact ggtcaggtga	120
agtgaatgac aaaaatattc aagtggtgga gctccccatt gtagacagcc ttcatcctcg	180
gcctccttac ttaccactgg ctgttccaga agaccttgca gatcgactcg taagagtcca	240
tggtgatcct gcagtgtggt gggtgtccca gttcgtcaaa tatttgattc gtccacaacc	300
ttggctagaa aaggaaatag aagaagccac caagaagctt ggcttcaaac atccagtcat	360
tggagtccat gtcagacgca cagacaaagt gggaacagag gcagccttcc atcccatcga	420
agagtacatg gtacatgttg aagaacattt tcagcttctc gcacgcagaa tgcaagtgga	480
taaaaaaaga gtatatctgg ctaccgatga ccctgctttg ttaaaggagg caaagacaaa	540
gtactccaat tatgaattta ttagtgataa ctctatttct tggtcagctg gactacacaa	600
tcggtacaca gaaaattcac ttcggggcgt gatcctggat atacactttc tctctcaggc	660
tgacttccta gtgtgtactt tttcatccca ggtctgtcgg gttgcttatg aaatcatgca	720
aaccetgeat cetgatgeet etgeaaactt eeactettta gatgacatet actattttgg	780
aggccaaaat gcccacaacc agattgccgt ttatcctcac aaacctcgaa ctgatgagga	840
aattccaatg gaacctggag atatcattgg tgtggctgga aaccattggg atggttattc	900
taaaggtgtc aacagaaaac ttggaaaaac aggcttatat ccctcctaca aagtccgaga	960
gaagatagaa acggtcaag	979
<210> 8 <211> 40 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	
<400> 8 aagtataagc ttacatggat gacgatatcg ctgcgctcgt	40
<210> 9 <211> 40	

<211> DNA
<213> Artificial Sequence

 $\ensuremath{\texttt{\langle 220\rangle}}\xspace$ $\ensuremath{\texttt{\langle 223\rangle}}\xspace$ Description of Artificial Sequense: Synthetic DNA

<400> 9

atttaactgc aggaagcatt tgcggtggac gatggagggg

<210> 10 <211> 40 <212> DNA · <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	
<400> 10 atttaaggta ccgaagcatt tgcggtgcac gatggagggg	40
<210> 11 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	
<400> 11 ctccaattat gaatttatta gtg	23
<210> 12 <211> 25 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	
<400> 12 ggatgtttga agccaagctt cttgg	25
<210> 13 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	
<400> 13 gtccatggtg atcctgcagt gtgg	24
<210> 14 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	
<400> 14 caccaatgat atctccaggt tcc	23
<210> 15 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequense: Synthetic DNA	

	gatategetg egetegttgt egac	24
•	<210> 16 <211> 24 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 16 caggaaggaa ggctggaaaa gagc	24
	<210> 17 <211> 24 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
din had had	<400> 17 gatategetg egetegtegt egae	24
thus then then this Heal lead that	<210> 18 <211> 24 <212> DNA <213> Artificial Sequence	
# #	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 18 caggaaggaa ggctggaaga gagc	24
-	<210> 19 <211> 24 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 19 atgcgggcat ggactggttc ctgg	24
	<210> 20 <211> 27 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 20 ctatttttca gcttcaggat atgtggg	27
	<210> 21 <211> 24 <212> DNA	

```
<213> Artificial Sequence
 <223> Description of Artificial Sequense: Synthetic DNA
 <400> 21
 gtctgaagca ttatgtgttg aagc
 <210> 22
<211> 23
 <212> DNA
 <213> Artificial Sequence
 <223> Description of Artificial Sequense: Synthetic DNA
 <400> 22
 gtgagtacat tcattgtact gtg
 <210> 23
 <211> 575
 <212> PRT
 <213> Cricetulus griseus
 <400> 23
Met Arg Ala Trp Thr Gly Ser Trp Arg Trp Ile Met Leu Ile Leu Phe
1 5 15
Ala Trp Gly Thr Leu Leu Phe Tyr Ile Gly Gly His Leu Val Arg Asp 20 25 30
Lys Leu Glu Arg Leu Lys Gln Gln Asn Glu Asp Leu Arg Arg Met Ala 50 60
Glu Ser Leu Arg Ile Pro Glu Gly Pro Ile Asp Gln Gly Thr Ala Thr 65 70 75 80
Gly Arg Val Arg Val Leu Glu Glu Gln Leu Val Lys Ala Lys Glu Gln 85 \hspace{0.5cm} 90 \hspace{0.5cm} 95
Ile Glu Asn Tyr Lys Lys Gln Ala Arg Asn Asp Leu Gly Lys Asp His 100 105 110
Glu Ile Leu Arg Arg Ile Glu Asn Gly Ala Lys Glu Leu Trp Phe
115 120 125
Phe Leu Gln Ser Glu Leu Lys Lys Leu Lys Lys Leu Glu Gly Asn Glu
130 135 140
Leu Gln Arg His Ala Asp Glu Ile Leu Leu Asp Leu Gly His His Glu
145 150 155 160
Arg Ser Ile Met Thr Asp Leu Tyr Tyr Leu Ser Gln Thr Asp Gly Ala
165 170 175
Gly Glu Trp Arg Glu Lys Glu Ala Lys Asp Leu Thr Glu Leu Val Gln 180 185 190
Arg Arg Ile Thr Tyr Leu Gln Asn Pro Lys Asp Cys Ser Lys Ala Arg 195 200 205
Lys Leu Val Cys Asn Ile Asn Lys Gly Cys Gly Tyr Gly Cys Gln Leu
210 215 220
```

24

23

His His Val Val Tyr Cys Phe Met Ile Ala Tyr Gly Thr Gln Arg Thr 225 235 240 Leu Ile Leu Glu Ser Gln Asn Trp Arg Tyr Ala Thr Gly Gly Trp Glu 245 250 250 Thr Val Phe Arg Pro Val Ser Glu Thr Cys Thr Asp Arg Ser Gly Leu 260 270 Ser Thr Gly His Trp Ser Gly Glu Val Lys Asp Lys Asn Val Gln Val 275 280 285 Val Glu Leu Pro Ile Val Asp Ser Leu His Pro Arg Pro Pro Tyr Leu 290 295 300 Pro Leu Ala Val Pro Glu Asp Leu Ala Asp Arg Leu Leu Arg Val His 305 310 315 Gly Asp Pro Ala Val Trp Trp Val Ser Gln Phe Val Lys Tyr Leu Ile 325 330 335 Leu Gly Phe Lys His Pro Val Ile Gly Val His Val Arg Arg Thr Asp 355 360 365 Lys Val Gly Thr Glu Ala Ala Phe His Pro Ile Glu Glu Tyr Met Val 370 380 His Val Glu Glu His Phe Gln Leu Leu Glu Arg Arg Met Lys Val Asp 385 390 395 400 Lys Lys Arg Val Tyr Leu Ala Thr Asp Asp Pro Ser Leu Leu Lys Glu
405 410 415 Ala Lys Thr Lys Tyr Ser Asn Tyr Glu Phe Ile Ser Asp Asn Ser Ile 420 425 430 Ser Trp Ser Ala Gly Leu His Asn Arg Tyr Thr Glu Asn Ser Leu Arg 435 440 445 Gly Val Ile Leu Asp Ile His Phe Leu Ser Gln Ala Asp Phe Leu Val 450 460 Cys Thr Phe Ser Ser Gln Val Cys Arg Val Ala Tyr Glu Ile Met Gln 465 470 475 480 Thr Leu His Pro Asp Ala Ser Ala Asn Phe His Ser Leu Asp Asp Ile 485 490 495 Tyr Tyr Phe Gly Gln Asn Ala His Asn Gln Ile Ala Val Tyr Pro 500 505 510 His Gln Pro Arg Thr Lys Glu Glu Ile Pro Met Glu Pro Gly Asp Ile 515 520 525Ile Gly Val Ala Gly Asn His Trp Asn Gly Tyr Ser Lys Gly Val Asn 530 540 Arg Lys Leu Gly Lys Thr Gly Leu Tyr Pro Ser Tyr Lys Val Arg Glu 545 550 555 560 Lys Ile Glu Thr Val Lys Tyr Pro Thr Tyr Pro Glu Ala Glu Lys 565 570 575

<210> 24 <211> 575 <212> PRT

<213> Mus musculus

<400> 24 Met Arg Ala Trp Thr Gly Ser Trp Arg Trp Ile Met Leu Ile Leu Phe 1 5 10 Ala Trp Gly Thr Leu Leu Phe Tyr Ile Gly Gly His Leu Val Arg Asp 20 25 30Asn Asp His Pro Asp His Ser Ser Arg Glu Leu Ser Lys Ile Leu Ala 35 40 45Lys Leu Glu Arg Leu Lys Gln Gln Asn Glu Asp Leu Arg Arg Met Ala 50 55 60 Glu Ser Leu Arg Ile Pro Glu Gly Pro Ile Asp Gln Gly Thr Ala Thr 65 70 75 80Gly Arg Val Arg Val Leu Glu Glu Gln Leu Val Lys Ala Lys Glu Gln 85 90 95 Ile Glu Asn Tyr Lys Lys Gln Ala Arg Asn Gly Leu Gly Lys Asp His 100 105 110 Glu Ile Leu Arg Arg Ile Glu As
n Gly Ala Lys Glu Leu Tr
p Phe $115 \hspace{1.5cm} 120 \hspace{1.5cm} 125$ Phe Leu Gl
n Ser Glu Leu Lys Lys Leu Lys His Leu Glu Gly As
n Glu 130 $\,$ 135 $\,$ 140 Leu Gl
n Arg His Ala Asp Glu Ile Leu Leu Asp Leu Gly His His Glu
 145 $$ 150 $$ 155 $$ 160 Gly Asp Trp Arg Glu Lys Glu Ala Lys Asp Leu Thr Glu Leu Val Gln 180 185 190 Arg Arg Ile Thr Tyr Leu Gln Asn Pro Lys Asp Cys Ser Lys Ala Arg 195 200 205 Lys Leu Val Cys Asn Ile Asn Lys Gly Cys Gly Tyr Gly Cys Gln Leu 210 215 220 His His Val Val Tyr Cys Phe Met Ile Ala Tyr Gly Thr Gln Arg Thr 225 235 235 240 Leu Ile Leu Glu Ser Gln Asn Trp Arg Tyr Ala Thr Gly Gly Trp Glu 245 250 255 Thr Val Phe Arg Pro Val Ser Glu Thr Cys Thr Asp Arg Ser Gly Leu 260 270 Ser Thr Gly His Trp Ser Gly Glu Val Asn Asp Lys Asn Ile Gln Val 275 280 285 Val Glu Leu Pro Ile Val Asp Ser Leu His Pro Arg Pro Pro Tyr Leu 290 295 300 Pro Leu Ala Val Pro Glu Asp Leu Ala Asp Arg Leu Leu Arg Val His 305 310 315 Gly Asp Pro Ala Val Trp Trp Val Ser Gln Phe Val Lys Tyr Leu Ile 325 330 335

```
Arg Pro Gln Pro Trp Leu Glu Lys Glu Ile Glu Glu Ala Thr Lys Lys 340 345 350
Leu Gly Phe Lys His Pro Val Ile Gly Val His Val Arg Arg Thr Asp 355 360 365
Lys Val Gly Thr Glu Ala Ala Phe His Pro Ile Glu Glu Tyr Met Val
370 375 380
His Val Glu Glu His Phe Gln Leu Leu Ala Arg Arg Met Gln Val Asp 385 390 395 400
Lys Lys Arg Val Tyr Leu Ala Thr Asp Asp Pro Thr Leu Lys Glu 405 410 415
Ala Lys Thr Lys Tyr Ser Asn Tyr Glu Phe Ile Ser Asp Asn Ser Ile 420 425 430
Ser Trp Ser Ala Gly Leu His Asn Arg Tyr Thr Glu Asn Ser Leu Arg
435 440 445
Gly Val Ile Leu Asp Ile His Phe Leu Ser Gln Ala Asp Phe Leu Val
450 455 460
Cys Thr Phe Ser Ser Gln Val Cys Arg Val Ala Tyr Glu Ile Met Gln 465 470 475 480
Thr Leu His Pro Asp Ala Ser Ala Asn Phe His Ser Leu Asp Asp Ile 485 490 495
Tyr Tyr Phe Gly Gly Gln Asn Ala His Asn Gln Ile Ala Val Tyr Pro 500 505 510
His Lys Pro Arg Thr Glu Glu Glu Ile Pro Met Glu Pro Gly Asp Ile 515 525
Ile Gly Val Ala Gly Asn His Trp Asp Gly Tyr Ser Lys Gly Ile Asn 530
Lys Ile Glu Thr Val Lys Tyr Pro Thr Tyr Pro Glu Ala Glu Lys
565 570 575
```

<210> 25

<211> 18 <212> PRT

<213> Homo sapiens

<400> 25 Asp Glu Ser Ile Tyr Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys 1 15

Pro Cys

<210> 26 <211> 25 <212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequense: Synthetic DNA

<400> 26

	ctigigigac tettaactet cagag	25
	<210> 27 <211> 23 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 27 ccctcgagat aacttcgtat agc	23
	<210> 28 <211> 18 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 28 ggtaggcctc actaactg	18
6m den den 8e den Geld den 14.8	<210> 29 <211> 25 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 29 catagaaaca agtaacaaca gccag	25
	<210> 30 <211> 28 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 30 gagacttcag cccacttcaa ttattggc	28
	<210> 31 <211> 25 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequense: Synthetic DNA	
	<400> 31 gaggccactt gtgtagcgcc aagtg	25
	<210> 32 <211> 24 <212> DNA <213> Artificial Sequence	

	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 32 aggaaggtgg cgctcatcac gggc	24
	<210> 33 <211> 26 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	$\langle 400 angle \ 33$ taaggccaca agtettaatt gcatec	26
	<210> 34 <211> 27 <212> DNA <213> Artificial Sequence	
	$\ensuremath{^{\langle 220 \rangle}}$ $\ensuremath{^{\langle 223 \rangle}}$ Description of Artificial Sequence: Synthetic DNA	
Specifical New No. Speciments and small	<400> 34 caggggtgtt cccttgagga ggtggaa	27
	<210> 35 <211> 23 <212> DNA <213> Artificial Sequence	
And the state of t	<220> <223> Description of Artificial Sequence: Synthetic DNA	
e i	<400> 35 cccctcacgc atgaagcctg gag	23
	<210> 36 <211> 28 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 36 ggcaggagac caccttgcga gtgcccac	28
	<210> 37 <211> 28 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 37 ggcgctggct tacccggaga ggaatggg	28
	<210≻ 38	

<211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 38 aaaaggcctc agttagtgaa ctgtatgg	28
<210> 39 <211> 29 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 39 cgcggatcct caagcgttgg ggttggtcc	29
<210> 40 <211> 45 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 40 cccaagettg ccaccatgge teacgeteec getagetgee egage	45
<210> 41 <211> 31 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 41 ccggaattct gccaagtatg agccatcctg g	31
<210> 42 <211> 17 <212> DNA <213> Artificial Sequence	
<pre><220> <223> Description of Artificial Sequence: Synthetic DNA</pre>	
<400> 42 gccatccaga aggtggt	17
<210> 43 <211> 17 <212> DNA <213> Artificial Sequence	
<pre><220> <223> Description of Artificial Sequence: Synthetic DNA</pre>	
<400> 43	

gtcttgtcag ggaagat	17
<210> 44 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 44 ggcaggagac caccttgcga gtgcccac	28
<210> 45 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 45 gggtgggctg taccttctgg aacagggc	28
<210> 46 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic DNA	
<400> 46 ggcgctggct tacccggaga ggaatggg	28
<210> 47 <211> 28 <212> DNA <213> Artificial Sequence	
<pre><220> <223> Description of Artificial Sequence: Synthetic DNA</pre>	
<pre><400> 47 ggaatgggtg tttgtctcctc caaagatgc</pre>	28
<210> 48 <211> 1316 <212> DNA <213> Cricetulus griseus	
<400> 48 gccccgccc ctccacctgg accgagagta gctggagaat tgtgcaccgg aagtagctct	60
tggactggtg gaaccctgcg caggtgcagc aacaatgggt gagccccagg gatccaggag	
gatcctagtg acagggggct ctggactggt gggcagagct atccagaagg tggtcgcaga	
tggcgctggc ttacccggag aggaatgggt gtttgtctcc tccaaagatg cagatctgac	240
ggatgcagca caaacccaag ccctgttcca gaaggtacag cccacccatg tcatccatct	300
tgctgcaatg gtaggaggcc ttttccggaa tatcaaatac aacttggatt tctggaggaa	360

gaatgtgcac atcaatgaca acgtcctgca ctcagctttc gaggtgggca ctcgcaaggt 420 ggtctcctgc ctgtccacct gtatcttccc tgacaagacc acctatccta ttgatgaaac 480 aatgatccac aatggtccac cccacagcag caattttggg tactcgtatg ccaagaggat 540 gattgacgtg cagaacaggg cetactteca geageatgge tgeacettea etgetgteat 600 ccctaccaat gtctttggac ctcatgacaa cttcaacatt gaagatggcc atgtgctgcc 660 tggcctcatc cataaggtgc atctggccaa gagtaatggt tcagccttga ctgtttgggg 720 tacagggaaa ccacggaggc agtteateta eteaetggac etageeegge tetteatetg 780 ggtcctgcgg gagtacaatg aagttgagcc catcatcctc tcagtgggcg aggaagatga 840 agtetecatt aaggaggeag etgaggetgt agtggaggee atggaettet gtggggaagt 900 cacttttgat tcaacaaagt cagatgggca gtataagaag acagccagca atggcaagct 960 tegggeetae ttgeetgatt teegttteae accetteaag eaggetgtga aggagaeetg 1020 tgcctggttc accgacaact atgagcaggc ccggaagtga agcatgggac aagcgggtgc 1080 teagetggea atgeceagte agtaggetge agteteatea tttgettgte aagaaetgag 1140 gacagtatec ageaacetga gecacatget ggtetetetg ecaggggget teatgeagee 1200 atccagtagg gcccatgttt gtccatcctc gggggaaggc cagaccaaca ccttgtttgt 1260 ctgcttctgc cccaacctca gtgcatccat gctggtcctg ctgtcccttg tctaga 1316 <210> 49 <211> 23 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic DNA <400> 49 23 gatcctgctg ggaccaaaat tgg <210> 50 <211> 22 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic DNA <400> 50 22 cttaacatcc caagggatgc tg <210> 51 〈211〉 1965 <212> DNA <213> Cricetulus griseus acgggggget cccggaagcg gggaccatgg cgtctctgcg cgaagcgagc ctgcggaagc 60

tgcggcgctt ttccgagatg agaggcaaac ctgtggcaac tgggaaattc tgggatgtag 120

ttgtaataac agcagctgac gaaaagcagg agcttgctta caagcaacag ttgtcggaga 180 agctgaagag aaaggaattg ccccttggag ttaactacca tgttttcact gatcctcctg 240 gaaccaaaat tggaaatgga ggatcaacac tttgttctct tcagtgcctg gaaagcctct 300 atggagacaa gtggaattee tteacagtee tgttaattea etetggtgge tacagteaac 360 gacttcccaa tgcaagcgct ttaggaaaaa tcttcacggc tttaccactt ggtgagccca 420 tttatcagat gttggactta aaactagcca tgtacatgga tttcccctca cgcatgaagc 480 ctggagtttt ggtcacctgt gcagatgata ttgaactata cagcattggg gactctgagt 540 ccattgcatt tgagcagcct ggctttactg ccctagccca tccatctagt ctggctgtag 600 gcaccacaca tggagtattt gtattggact ctgccggttc tttgcaacat ggtgacctag 660 agtacaggca atgccaccgt ttcctccata agcccagcat tgaaaacatg caccacttta 720 atgccgtgca tagactagga agctttggtc aacaggactt gagtgggggt gacaccacct 780 gtcatccatt gcactctgag tatgtctaca cagatagcct attttacatg gatcataaat 840 cagccaaaaa gctacttgat ttctatgaaa gtgtaggccc actgaactgt gaaatagatg 900 cctatggtga ctttctgcag gcactgggac ctggagcaac tgcagagtac accaagaaca 960 cctcacacgt cactaaagag gaatcacact tgttggacat gaggcagaaa atattccacc 1020 tecteaaggg aacaeeeetg aatgttgttg teettaataa eteeaggttt tateaeattg 1080 gaacaacgga ggagtatctg ctacatttca cttccaatgg ttcgttacag gcagagctgg 1140 gettgeaate catagettte agtgtettte caaatgtgee tgaagaetee catgagaaac 1200 cctgtgtcat tcacagcatc ctgaattcag gatgctgtgt ggcccctggc tcagtggtag 1260 aatattccag attaggacct gaggtgtcca tctcggaaaa ctgcattatc agcggttctg 1320 tcatagaaaa agctgttctg ccccatgtt ctttcgtgtg ctctttaagt gtggagataa 1380 atggacactt agaatattca actatggtgt ttggcatgga agacaacttg aagaacagtg 1440 ttaaaaccat atcagatata aagatgette agttetttgg agtetgttte etgaettgtt 1500 tagatatttg gaaccttaaa gctatggaag aactattttc aggaagtaag acgcagctga 1560 gcctgtggac tgctcgaatt ttccctgtct gttcttctct gagtgagtcg gttgcagcat 1620 cccttgggat gttaaatgcc attcgaaacc attcgccatt cagcctgagc aacttcaagc 1680 tgctgtccat ccaggaaatg cttctctgca aagatgtagg agacatgctt gcttacaggg 1740 agcaactett tetagaaate agtteaaaga gaaaacagte tgatteggag aaatettaaa 1800 tacaatggat tttgcctgga aacaggattg caaatgcagg catattctat agatctctgg 1860 gttettettt ettteteece teteteettt eettteeett tgatgtaatg acaaaggtaa 1920 1965

<210> 52 <211> 27

<212> DNA

<213> Artificial Sequence

	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 52 caggggtgtt cccttgagga ggtggaa	27
	<210> 53 <211> 27 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 53 cactgagcca ggggccacac agcatcc	27
Ę.	<210> 54 <211> 23 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
How then the a los that the think that	<400> 54 cccctcacgc atgaagcctg gag	23
	<210> 55 <211> 27 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
j j	<400> 55 tgccaccgtt tcctccataa gcccagc	27
	<210> 56 <211> 28 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 56 atggeteaag etecegetaa gtgeeega	28
	<210> 57 <211> 27 <212> DNA <213> Artificial Sequence	٠
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 57 tcaagcgttt gggttggtcc tcatgag	27
	<210> 58	

	<211> 25 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 58 tccggggatg gcgagatggg caagc	25
	<210> 59 <211> 24 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 59 cttgacatgg ctctgggctc caag	24
	<210> 60 <211> 25 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 60 ccacttcagt cggtcggtag tattt	25
Pred that I mit that the	<210> 61 <211> 24 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 61 cgctcacccg cctgaggcga catg	24
	<210> 62 <211> 32 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	<400> 62 ggcaggtgct gtcggtgagg tcaccatagt gc	32
	<210> 63 <211> 24 <212> DNA <213> Artificial Sequence	
	<220> <223> Description of Artificial Sequence: Synthetic DNA	
	⟨400⟩ 63	

```
<210> 64
<211> 25
<212> DNA
 <213> Artificial Sequence
 <223> Description of Artificial Sequence: Synthetic DNA
 <400> 64
                                                                                                                                   25
 atgtggctga tgttacaaaa tgatg
<210> 65
<211> 1504
<212> DNA
 <213> Cricetulus griseus
<220>
<221> CDS
<222> (1)..(1119)
 <400> 65
atg gct cac gct ccc gct agc tgc ccg agc tcc agg aac tct ggg gac Met Ala His Ala Pro Ala Ser Cys Pro Ser Ser Arg Asn Ser Gly Asp 1 \quad 5 \quad 10 \quad 15
ggc gat aag ggc aag ccc agg aag gtg gcg ctc atc acg ggc atc acc Gly Asp Lys Gly Lys Pro Arg Lys Val Ala Leu Ile Thr Gly Ile Thr 20 25 30
ggc cag gat ggc tca tac ttg gca gaa ttc ctg ctg gag aaa gga tac Gly Gln Asp Gly Ser Tyr Leu Ala Glu Phe Leu Leu Glu Lys Gly Tyr
                                                                                                                                   144
gag gtt cat gga att gta cgg cga tcc agt tca ttt aat aca ggt cga Glu Val His Gly Ile Val Arg Arg Ser Ser Ser Phe Asn Thr Gly Arg 50 60
                                                                                                                                   192
att gaa cat tta tat aag aat cca cag gct cat att gaa gga aac atg
Ile Glu His Leu Tyr Lys Asn Pro Gln Ala His Ile Glu Gly Asn Met
65 70 75 80
                                                                                                                                   240
aag ttg cac tat ggt gac ctc acc gac agc acc tgc cta gta aaa atc Lys Leu His Tyr Gly Asp Leu Thr Asp Ser Thr Cys Leu Val Lys Ile 85 90 95 100
atc aat gaa gtc aaa cct aca gag atc tac aat ctt ggt gcc cag agc
Ile Asn Glu Val Lys Pro Thr Glu Ile Tyr Asn Leu Gly Ala Gln Ser
                                                                                                                                   336
cat gtc aag att tcc ttt gac tta gca gag tac act gca gat gtt gat His Val Lys Ile Ser Phe Asp Leu Ala Glu Tyr Thr Ala Asp Val Asp 120 \, 125 \, 130 \,
                                                                                                                                   384
gga gtt ggc acc ttg cgg ctt ctg gat gca att aag act tgt ggc ctt Gly Val Gly Thr Leu Arg Leu Leu Asp Ala Ile Lys Thr Cys Gly Leu 135 140 145
                                                                                                                                   432
ata aat tot gtg aag tto tac cag gcc toa act agt gaa ctg tat gga Ile Asn Ser Val Lys Phe Tyr Gln Ala Ser Thr Ser Glu Leu Tyr Gly 150 160
aaa gtg caa gaa ata ccc cag aaa gag acc acc cct ttc tat cca agg
Lys Val Gln Glu Ile Pro Gln Lys Glu Thr Thr Pro Phe Tyr Pro Arg
```

tcg	ссс	tat	gga	gca	gçc	aaa	ctt	<u>t</u> at	gcc	tat	tgg	att	gta	gtg	aac	576
Ser	Pro	Tyr	Gly	Ala 185	Ala	Lys	Leu	Tyr	Ala 190	Tyr	Trp	Ile	Val	Val 195	Asn	
ttt Phe	cga Arg	gag Glu	gct Ala 200	tat Tyr	aat Asn	ctc Leu	ttt Phe	gcg Ala 205	gtg Val	aac Asn	ggc Gly	att Ile	ctc Leu 210	ttc Phe	aat Asn	624
cat His	gag Glu	agt Ser 215	cct Pro	aga Arg	aga Arg	gga Gly	gct Ala 220	aat Asn	ttt Phe	gtt Val	act Thr	cga Arg 225	aaa Lys	att Ile	agc Ser	672
cgg Arg	tca Ser 230	gta Val	gct Ala	aag Lys	att Ile	tac Tyr 235	ctt Leu	gga Gly	caa Gln	ctg Leu	gaa Glu 240	tgt Cys	ttc Phe	agt Ser	ttg Leu	720
gga Gly 245	aat Asn	ctg Leu	gac Asp	gcc Ala	aaa Lys 250	cga Arg	gac Asp	tgg Trp	ggc Gly	cat His 255	gcc Ala	aag Lys	gac Asp	tat Tyr	gtc Val 260	768
	gct Ala															816
ata Ile	gct Ala	act Thr	ggg Gly 280	gaa Glu	gtt Val	cat His	agt Ser	gtc Val 285	cgt Arg	gaa Glu	ttt Phe	gtt Val	gag Glu 290	aaa Lys	tca Ser	864
ttc Phe	atg Met	cac His 295	att Ile	gga Gly	aag Lys	acc Thr	att Ile 300	gtg Val	tgg Trp	gaa Glu	gga Gly	aag Lys 305	aat Asn	gaa Glu	aat Asn	912
gaa Glu	gtg Val 310	ggc Gly	aga Arg	tgt Cys	aaa Lys	gag Glu 315	acc Thr	ggc Gly	aaa Lys	att Ile	cat His 320	gtg Val	act Thr	gtg Val	gat Asp	960
ctg Leu 325	aaa Lys	tac Tyr	tac Tyr	cga Arg	cca Pro 330	act Thr	gaa Glu	gtg Val	gac Asp	ttc Phe 335	ctg Leu	cag Gln	gga Gly	gac Asp	tgc Cys 340	1008
	aag Lys															1056
gag Glu	ctg Leu	gtg Val	agg Arg 360	gag Glu	atg Met	gtg Val	caa Gln	gcc Ala 365	gat Asp	gtg Val	gag Glu	ctc Leu	atg Met 370	aga Arg	acc Thr	1104
	ccc Pro			tga	gcac	ectet	ac a	ıaaaa	ıaatt	c go	gaga	acate	g gao	tate	ggtg	1159
cct; acto caa; ttt	gtgto ccaga gaagt	egt o egc t ett a ect t	ccca aagg aaat gaga	cago ccaca caca ttgt	t aa t to it ac t tt	gago gott tcat	tggg ttgt ttta tttt	cca caa ctt	cagg aggc gaaa atta	ttt tcc itta iaat	gtgg tctc tgtc gatc	ggcac caatg cacta ctttc	ca g gat t nga c	gace ttgg aact	gactg gggac gaaat taaat cagca	1279 1339 1399

<210> 66 <211> 25 <212> DNA <213> Artificial Sequence

 $[\]ensuremath{^{<\!220>}}\xspace$ $\ensuremath{^{<\!223>}}\xspace$ Description of Artificial Sequence: Synthetic DNA

	<400> 66 atgaagttgc actatggtga cctca	25											
	<210> 67 <211> 59 <212> DNA <213> Cricetulus griseus												
	<400> 67 ccgacagcac ctgcctagta aaaatcatca atgaagtcaa acctacagag atctacaat	59											
	<210> 68 <211> 25 <212> DNA <213> Artificial Sequence												
	<220> <223> Description of Artificial Sequence: Synthetic DNA												
	<400> 68 gacttagcag agtacactgc agatg												
Then then them to save and the that the	<210> 69 <211> 25 <212> DNA <213> Artificial Sequence												
	<220> <223> Description of Artificial Sequence: Synthetic DNA												
	<400> 69 accttggata gaaaggggtg gtctc	25											
	<210> 70 <211> 125 <212> DNA <213> Cricetulus griseus												
	<400> 70 ttgatggagt tggcaccttg cggcttctgg atgcaattaa gacttgtggc cttataaatt ctgtgaagtt ctaccaggcc tcaactagtg aactgtatgg aaaagtgcaa gaaatacccc agaaa												
	<210> 71 <211> 376 <212> PRT <213> Cricetulus griseus												
	<400> 71 Met Ala His Ala Pro Ala Ser Cys Pro Ser Ser Arg Asn Ser Gly Asp 1 5 10 15												
	Gly Asp Lys Gly Lys Pro Arg Lys Val Ala Leu Ile Thr Gly Ile Thr												
	Gly Gln Asp Gly Ser Tyr Leu Ala Glu Phe Leu Leu Glu Lys Gly Tyr 35 40 45												
	Glu Val His Gly Ile Val Arg Arg Ser Ser Ser Phe Asn Thr Gly Arg												
	Ile Glu His Leu Tyr Lys Asn Pro Gln Ala His Ile Glu Gly Asn Met												

70 75 80 65 Lys Leu His Tyr Gly Asp Leu Thr Asp Ser Thr Cys Leu Val Lys Ile 85 90 95 100 Ile Asn Glu Val Lys Pro Thr Glu Ile Tyr Asn Leu Gly Ala Gln Ser 105 110 115 His Val Lys Ile Ser Phe Asp Leu Ala Glu Tyr Thr Ala Asp Val Asp $120\,$ Gly Val Gly Thr Leu Arg Leu Leu Asp Ala Ile Lys Thr Cys Gly Leu 135 140 145 Ile Asn Ser Val Lys Phe Tyr Gln Ala Ser Thr Ser Glu Leu Tyr Gly 150 160 Lys Val Gln Glu Ile Pro Gln Lys Glu Thr Thr Pro Phe Tyr Pro Arg 165 170 175 180 Ser Pro Tyr Gly Ala Ala Lys Leu Tyr Ala Tyr Trp Ile Val Val Asn 185 190 195 Phe Arg Glu Ala Tyr Asn Leu Phe Ala Val Asn Gly Ile Leu Phe Asn 200 205 210 His Glu Ser Pro Arg Arg Gly Ala Asn Phe Val Thr Arg Lys Ile Ser $215 \hspace{1cm} 220 \hspace{1cm} 225 \hspace{1cm}$ Arg Ser Val Ala Lys Ile Tyr Leu Gly Gln Leu Glu Cys Phe Ser Leu 230 240 Gly Asn Leu Asp Ala Lys Arg Asp Trp Gly His Ala Lys Asp Tyr Val $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255 \hspace{1.5cm} 260$ Ile Ala Thr Gly Glu Val His Ser Val Arg Glu Phe Val Glu Lys Ser 280 285 290 Glu Val Gly Arg Cys Lys Glu Thr Gly Lys Ile His Val Thr Val Asp 310 320Leu Lys Tyr Tyr Arg Pro Thr Glu Val Asp Phe Leu Gln Gly Asp Cys 325 330 335Ser Lys Ala Gln Gln Lys Leu Asn Trp Lys Pro Arg Val Ala Phe Asp 345 350 355 Glu Leu Val Arg Glu Met Val Gl
n Ala Asp Val Glu Leu Met Arg Thr $360 \hspace{1.5cm} 365 \hspace{1.5cm} 370 \hspace{1.5cm}$ Asn Pro Asn Ala 375

<210> 72 <211> 321

Met Gly Glu Pro Gln Gly Ser Arg Arg Ile Leu Val Thr Gly Gly Ser 1 15

<212> PRT

<213> Cricetulus griseus

Gly Leu Val Gly Arg Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly 20 25 30 Leu Pro Gly Glu Glu Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu 35 40 45 Thr Asp Ala Ala Gln Thr Gln Ala Leu Phe Gln Lys Val Gln Pro Thr 50 60 His Val Ile His Leu Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile 65 70 75 80 Lys Tyr Asn Leu Asp Phe Trp Arg Lys Asn Val His Ile Asn Asp Asn 85 90 95 Val Leu His Ser Ala Phe Glu Val Gly Thr Arg Lys Val Val Ser Cys 100 105 110 Leu Ser Thr Cys Ile Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu 115 120 125 Thr Met Ile His Asn Gly Pro Pro His Ser Ser Asn Phe Gly Tyr Ser 130 135 140 Tyr Ala Lys Arg Met Ile Asp Val Gln Asn Arg Ala Tyr Phe Gln Gln 145 150 155 160 His Gly Cys Thr Phe Thr Ala Val Ile Pro Thr Asn Val Phe Gly Pro $165 \hspace{1cm} 170 \hspace{1cm} 175 \hspace{1cm}$ His Asp Asn Phe Asn Ile Glu Asp Gly His Val Leu Pro Gly Leu Ile 180 185 190 His Lys Val His Leu Ala Lys Ser Asn Gly Ser Ala Leu Thr Val Trp 195 200 205 Gly Thr Gly Lys Pro Arg Arg Gln Phe Ile Tyr Ser Leu Asp Leu Ala 210 215 220 Arg Leu Phe Ile Trp Val Leu Arg Glu Tyr Asn Glu Val Glu Pro Ile 225 230 235 240 Ile Leu Ser Val Gly Glu Glu Asp Glu Val Ser Ile Lys Glu Ala Ala 245 250 255 Glu Ala Val Val Glu Ala Met Asp Phe Cys Gly Glu Val Thr Phe Asp 260 265 270 Ser Thr Lys Ser Asp Gly Gln Tyr Lys Lys Thr Ala Ser Asn Gly Lys 275 280 285Leu Arg Ala Tyr Leu Pro Asp Phe Arg Phe Thr Pro Phe Lys Gln Ala 290 295 Val Lys Glu Thr Cys Ala Trp Phe Thr Asp Asn Tyr Glu Gln Ala Arg 305 310 315 320 Lys

<210> 73 <211> 590 <212> PRT

<213> Cricetulus griseus

<400> 73

Met Ala Ser Leu Arg Glu Ala Ser Leu Arg Lys Leu Arg Arg Phe Ser



15 10 Glu Met Arg Gly Lys Pro Val Ala Thr Gly Lys Phe Trp Asp Val Val 20 25 30 Val Ile Thr Ala Ala Asp Glu Lys Gln Glu Leu Ala Tyr Lys Gln Gln 35 40 45 Leu Ser Glu Lys Leu Lys Arg Lys Glu Leu Pro Leu Gly Val As
n Tyr $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60 \hspace{1.5cm}$ His Val Phe Thr Asp Pro Pro Gly Thr Lys Ile Gly Asn Gly Gly Ser 65 70 75 80 Thr Leu Cys Ser Leu Gln Cys Leu Glu Ser Leu Tyr Gly Asp Lys Trp 85 90 95 Asn Ser Phe Thr Val Leu Leu Ile His Ser Gly Gly Tyr Ser Gln Arg 100 105 110 Leu Pro Asn Ala Ser Ala Leu Gly Lys Ile Phe Thr Ala Leu Pro Leu 115 120 125 Gly Glu Pro Ile Tyr Gln Met Leu Asp Leu Lys Leu Ala Met Tyr Met 130 135 140 Asp Phe Pro Ser Arg Met Lys Pro Gly Val Leu Val Thr Cys Ala Asp 145 150 155 160 Asp Ile Glu Leu Tyr Ser Ile Gly Asp Ser Glu Ser Ile Ala Phe Glu 165 170 175 Gln Pro Gly Phe Thr Ala Leu Ala His Pro Ser Ser Leu Ala Val Gly 180 185 190 Thr Thr His Gly Val Phe Val Leu Asp Ser Ala Gly Ser Leu Gln His $195 \hspace{1cm} 200 \hspace{1cm} 205$ Gly Asp Leu Glu Tyr Arg Gln Cys His Arg Phe Leu His Lys Pro Ser 210 220 Ile Glu Asn Met His His Phe Asn Ala Val His Arg Leu Gly Ser Phe 230 235 Leu Gly Ser Phe 240Gly Gln Gln Asp Leu Ser Gly Gly Asp Thr Thr Cys His Pro Leu His 245 250 255 Ser Glu Tyr Val Tyr Thr Asp Ser Leu Phe Tyr Met Asp His Lys Ser 260 265 270Ala Lys Lys Leu Leu Asp Phe Tyr Glu Ser Val Gly Pro Leu Asn Cys 275 280 285 Glu Ile Asp Ala Tyr Gly Asp Phe Leu Gl
n Ala Leu Gly Pro Gly Ala $290 \hspace{1cm} 295 \hspace{1cm} 300 \hspace{1cm}$ Thr Ala Glu Tyr Thr Lys Asn Thr Ser His Val Thr Lys Glu Glu Ser 310 315 320His Leu Leu Asp Met Arg Gln Lys Ile Phe His Leu Leu Lys Gly Thr 325 330 Leu Leu Lys Gly Thr Pro Leu Asn Val Val Leu Asn Asn Ser Arg Phe Tyr His Ile Gly 340Thr Thr Glu Glu Tyr Leu Leu His Phe Thr Ser Asn Gly Ser Leu Gln 355 360 365



 Ala
 Glu
 Leu
 Gly
 Leu
 Gln
 Ser June
 Ala
 Phe
 Ser June
 Phe
 Pro June
 Ash
 Phe
 Pro June
 Phe
 Pro June
 Pro June
 Phe
 Phe
 Pro June
 Pro June
 Phe
 Phe
 Pro June
 <